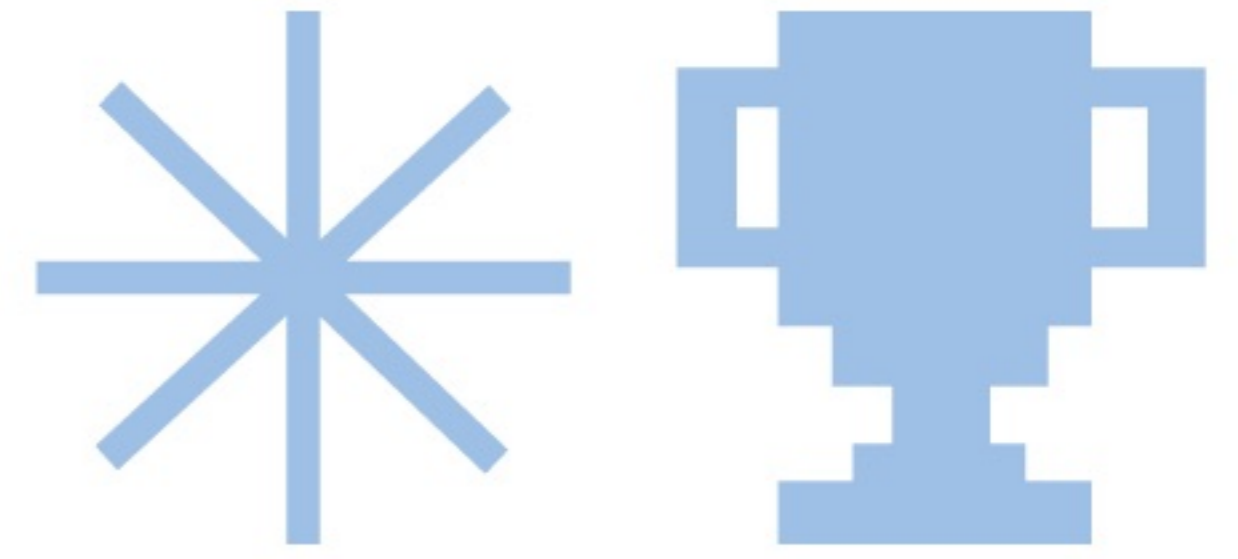


# WELCOME TO RUSSIA



In Khanty-Mansiysk the International Scientific Physics Olympiad (ISPhO) has brought together school students from 23 countries around the world. All of them came here, of course, with the hope of winning, full of excitement, ready to solve complex problems and conduct difficult experiments. I am sure that at some point in the future we will hear the names of today's participants among the famous physicists, innovators and researchers who have made amazing discoveries and entered the global scientific elite. It is a great honor for Phystech to take part in organizing this Olympiad. Our experienced experts have created the most interesting tasks so that each team, each participant could prove themselves, show their talents and skills. I want to wish you all victory but even participation in the International Scientific Physics Olympiad itself is a very powerful start of a long journey into the enormous natural science world.

MIPT Rector  
Dmitry Livanov



I am glad to welcome the participants of the International Scientific Physics Olympiad! The next few days will be difficult and intense, but I am sure that everyone will enjoy what the organizers of the Olympiad have prepared for them. Participants will be able to gain valuable experience in solving complex non-standard theoretical and experimental problems, and the lectures presented in the framework of the Science Festival will help to delve deeper into the given tasks. I wish each of you best results in the upcoming competitions!

Chairman of the Academic Committee of the International Scientific Physics Olympiad Vitaly Shevchenko



## KHANTY-MANSIYSK - THE CAPITAL OF THE OLYMPIAD

The city is located in the very center of Siberia – there are more than 100 thousand people living here. This is not the first time Khanty-Mansiysk hosts an international competition. Previously, there were held Biathlon World Championship, the World Chess Olympiad, and an international IT forum with the participation of the BRICS and SCO countries. There are a lot of places of attraction in the city, among them are the cultural and tourist complex "Archeopark" with bronze mammoths, the bridge over the Irtysh river called Red Dragon and the natural park "Samarovsky Chugas".



## LIST OF COUNTRIES



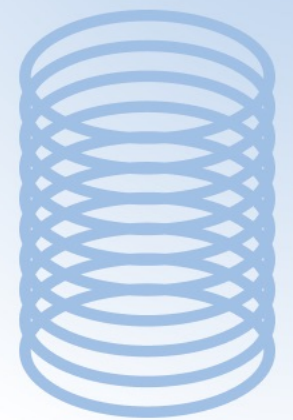
Olympiad website



Official telegram channel



# THE OPENING CEREMONY



Participants of the International Scientific Physics Olympiad with their national flags



Chairman of the Academic Committee of the International Scientific Physics Olympiad Vitaly Shevchenko

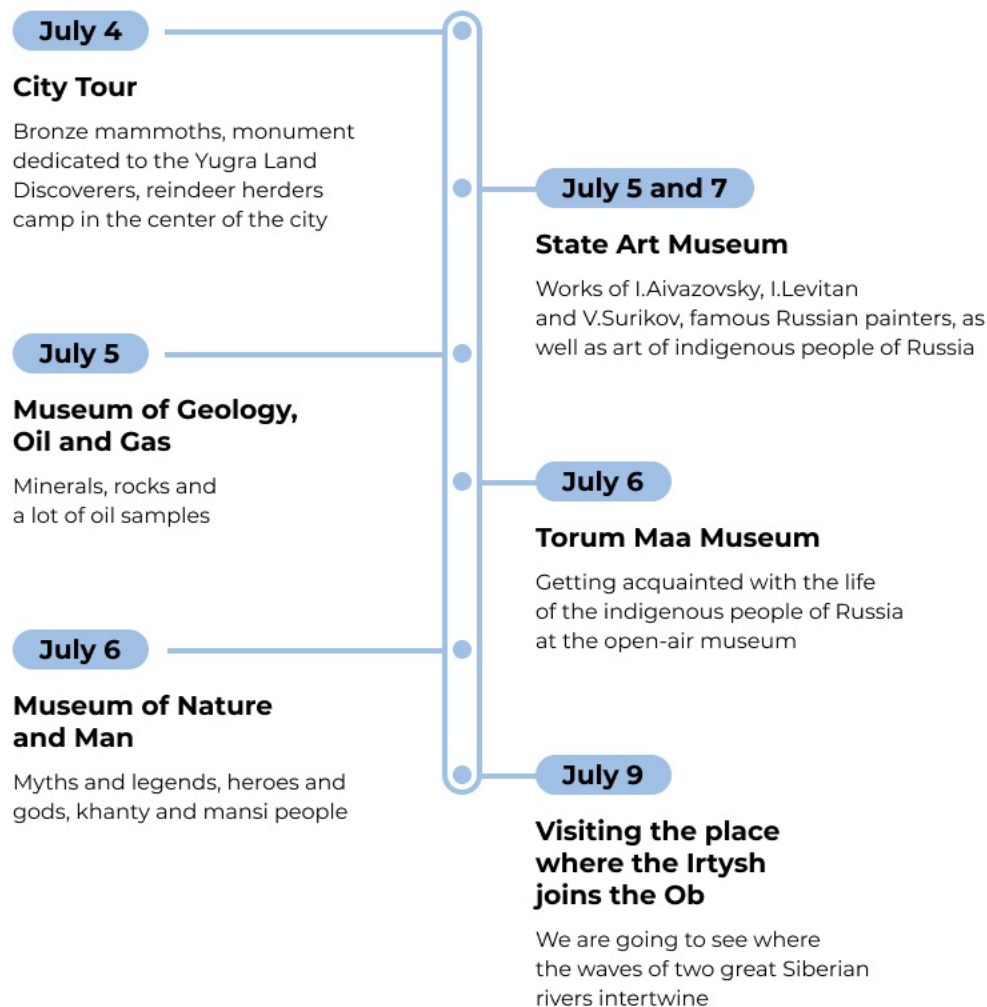


Dance performance "The rhythm of Ugra"

Talented high school students from the CIS countries, Asia and Latin America gathered in the capital of Ugra - the International Scientific Physics Olympiad has begun. The participants of the intellectual tournament will have to show not only deep knowledge of the main sections of physics, but also demonstrate skills of computer analysis and modeling. At the opening ceremony, the teams were shown short videos, dance and musical performances by local ensembles, so they had an opportunity to learn about the history and culture of Ugra.

In addition to the competitions the participants will enjoy a cultural and academic program. They will visit historical and art museums, as well as will get acquainted with the work of research centers of Khanty-Mansiysk.

## OLYMPIAD'S CULTURAL ROUTE



## OLYMPIAD'S ACADEMIC ROUTE



Dear participants and guests of the International Scientific Physics Olympiad!

Welcome to Ugra! Our region is the energy heart of Russia, a source of natural reserves of oil and gas in Western Siberia, a place of concentration of the richest water and forest resources. Possessing such strategic opportunities, we understand a particular responsibility for their careful and effective use, preservation of natural balance, and harmonious development of technologies. A special priority for us in this work is to support young scientists and develop the system of Physics, Mathematics, and engineering education. We are grateful to our partners, the Ministry of Education of the Russian Federation, for their trust to let us host talented young physicists from around the world, to become a platform for scientific discoveries and knowledge exchange. I am sure that for each of you, dear participants of the Olympiad, Ugra will become a "place of strength", opening new horizons for scientific discoveries and professional growth. I wish you to successfully complete the competitive distance, demonstrate deep, thorough knowledge, team cohesion and willingness to respond to scientific challenges. Good luck on your way to new heights!

Deputy Governor of the Khanty-Mansi Autonomous Area – Ugra  
Elena Shumakova



Сайт олимпиады



Телеграм олимпиады



# CULTURAL IMMERSION



Walk around the Archeopark



Bronze sculptures of 11 mammoths is one of the symbols of Khanty-Mansiysk



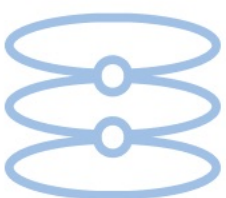
On the stands of the A.V. Filipenko Winter Sports Center



Sightseeing platform at the Archeopark



Ethno-performance at the monument dedicated to the Ugra Land Discoverers



## THE THEORETICAL EXAMINATION HAS ENDED

The first day of the competition took place at the school No.9 in Khanty-Mansiysk. Here the workspace was equipped in accordance with the requirements of the RIAC. These are national prerogatives. The teams had only five hours to complete the competition tasks.

*"The participants were offered three long problems: one had elements of mathematical modelling, in which the equation would be solved automatically by a computer, and other two problems were solved by school students without the use of computers. All tasks of the theoretical tour are based on real scientific research. The work will be evaluated by an international jury,"*



Olympiad website



Official telegram channel

**JULY 7 IS THE DAY OF THE EXPERIMENTAL EXAMINATION.  
WE WISH THE PARTICIPANTS GOOD LUCK!**

author of the Olympiad tasks,  
Yaroslav Pozdnyak

# SCIENCE, CULTURE AND LOCAL HISTORY



## MAMMOTH, WOOLLY RHINOCEROS AND ANCIENT SHELL FISH



The Museum of Nature and Man is the oldest museum in the Khanty-Mansi Autonomous Area. There are plenty of unique artefacts there. For instance, the museum houses the bone of an ancient elephant pierced with a primitive man-made weapon seen as the evidence of an encounter between a primitive man and a mammoth. Young physicists-to-be have also seen the collection of fossils, namely, four coats of trilobites and shells of ammonites.

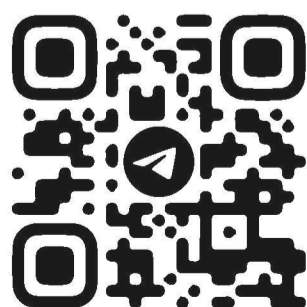


## CLUSTERBERRY PIES AND CHUM

One more destination on the map of the Olympiad's cultural route is the open-air museum "Torum Maa" (meant in the Mansi language as "a heavenly, holy land"). The representatives of the international delegations have taken a walk on hunter's path, visited the camps of reindeer-breeders as well as tried herbal tea and clusterberry pies which are called **shaneshki**.



Olympiad website



Official telegram channel

## BLACK GOLD

The Museum of Geology, Oil and Gas is the only state "oil" museum in Russia. The ISPhO participants have been able to not only learn more about the history of geological exploration and see rare minerals, but also touch oil in museum's halls.



# OLYMPIAD RESULTS



The best team result nomination winners



Speech of Vitaly Shevchenko, Chairman of the Academic Committee of the International Scientific Physics Olympiad



This performance is called "I've found oil. That's it!" and is dedicated to Farman Salmanov, a geologist and discoverer of Siberian oil.

## OLYMPIAD MEDAL TABLE

		Grand Prix - Russia
		1st Place - Belarus
		2nd Place - Kazakhstan
		3rd Place - Armenia

Full list of special prize winners is published on the official Telegram channel of the Olympiad



Official telegram channel



Olympiad website



## RIVER WALK ON BOAT

Participants and representatives of the Olympiad's Organizing Committee visited the place where the Irtysh meets the Ob, where the chapel of St.Nicolas the Wonderworker is located. The height of the chapel is 8 meters, it weights 10 tons. There is a lighthouse light under the cross. The chapel is attached to a submerged pontoon.



Closing Ceremony, river walk on boat, tours and many more photos can be found in the Olympiad's large photo bank.